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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/534,833	05/13/2005	Stefano Cerbini	2563-1001	8979	
466 YOUNG & TH	7590 04/19/2007 IOMPSON	EXAMINER			
745 SOUTH 23RD STREET			CHOI, PETER Y		
2ND FLOOR ARLINGTON,	VA 22202		ART UNIT	PAPER NUMBER	
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SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MONTHS		04/19/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Application No.	. 1	Applicant(s)		
Office Action Summary		10/534,833		CERBINI ET AL.		
		Examiner		Art Unit		
		Peter Y. Choi		1771		
The MAILING DATE of this communication appears on the cover sheet with the correspondence address						
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status	·			•		
1)🛛	Responsive to communication(s) filed on <u>08 Ma</u>	arch 2007.				
<i>,</i> —	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
3)	·— · · · · · · · · · · · · · · · · · ·					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Dispositi	ion of Claims					
4) Claim(s) 15-21 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) is/are allowed.  6) Claim(s) 15-21 is/are rejected.  7) Claim(s) is/are objected to.  8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
10)🛛	The specification is objected to by the Examiner The drawing(s) filed on 13 May 2005 is/are: a) Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction to the oath or declaration is objected to by the Ex	☑ accepted or b) drawing(s) be held ion is required if the	in abeyance. See e drawing(s) is obje	37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).		
Priority u	under 35 U.S.C. § 119					
<ul> <li>12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a)  All b)  Some * c) None of:</li> <li>1.  Certified copies of the priority documents have been received.</li> <li>2.  Certified copies of the priority documents have been received in Application No</li> <li>3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachmen	t(s)					
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO/SB/08)</li> <li>Paper No(s)/Mail Date 05/13/05.</li> </ol>			Interview Summary ( Paper No(s)/Mail Dat Notice of Informal Pa Other:	e		

#### **NON-FINAL ACTION**

#### Election/Restrictions

1. Claims 22-25 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Applicants subsequently cancelled claims 22-25 in Applicants' response of February 28, 2007.

Election was made without traverse in the reply filed on February 28, 2007.

### Specification

2. The disclosure is objected to because of the following informalities: "weight" is incorrectly spelled "weigth" throughout Applicants' specification. Appropriate corrections are required.

## Claim Objections

3. Claims 15-21 are objected to because of the following informalities:

Regarding claims 15-21, the claims recite the phrase "characterized in that". The scope of the claim is unclear. For example, it is unclear if Applicants intended the invention to only encompass the recited elements or if Applicants intended the invention to primarily encompass the recited elements and optionally additional elements. Examiner recommends Applicants change the phrase to "wherein".

Regarding claims 15-21, the preamble of each of the claims recites "[g]own, jacket or trousers". The claims are required to begin with an article such as "A gown, jacket or trousers".

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Claim 21 is objected to because of the following informalities: the word "joints" is spelled incorrectly. Presumably, Applicants intended "joints" as opposed to "joins".

Appropriate correction is required.

### Claim Rejections - 35 USC § 112

- 4. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 5. Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 21, dependent from claim 15, recites the limitation "the joins". There is insufficient antecedent basis for this limitation in claim 15.

#### Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 7. Claims 15 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 5,855,999 to McCormack.

Regarding claims 15 and 16, McCormack teaches a gown, jacket or trousers, suitable as protective clothing against biological agents and exhibiting very high level of protection against the penetration of liquids and microorganisms, mechanical resistance properties as well as

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outstanding softness, drapeability and comfort, characterized in that the material is manufactured by the lamination of an inner layer of non-woven polypropylene with an outer layer of polyethylene film, the unit weight ratio between polypropylene and polyethylene ranging from 70:30 to 50:50 (see entire document including column 1 lines 16-32, column 3 lines 21-26, column 4 lines 3-38, column 8 lines 17-34, column 9 lines 50-61, column 12 line 53 to column 13 line 32).

Regarding claim 16, the ratio in unit weight between polypropylene and polyethylene ranges from 65:35 to 55:45 (column 8 lines 17-34, column 12 line 53 to column 13 line 32).

### Claim Rejections - 35 USC § 102/103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claims 15-20 are rejected under 35 U.S.C. 102(b) as being anticipated by, or alternatively under 35 U.S.C. 103(a) as obvious over, USPN 5,589,249 to Bodford.

Regarding claims 15-20, Bodford teaches a gown, jacket or trousers, suitable as protective clothing against biological agents and exhibiting very high level of protection against the penetration of liquids and microorganisms, mechanical resistance properties as well as outstanding softness, drapeability and comfort, characterized in that the material is manufactured by the lamination of an inner layer of non-woven polypropylene with an outer layer of polyethylene film, the unit weight ratio between polypropylene and polyethylene ranging from

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70:30 to 50:50 (see entire document including column 2 lines 61-67, column 3 lines 6-21, column 7 line 37 to column 8 line 31, column 9 lines 10-37, Table II).

Regarding claim 16, the ratio in unit weight between polypropylene and polyethylene ranges from 65:35 to 55:45 (column 9 lines 10-37, Table II).

Regarding claim 17, the thickness of the material ranges between 101.6 and 1041.4 microns, and the unit weight ranges between 55 and 75 g/m<sup>2</sup> (column 3 lines 6-21, column 7 line 37 to column 8 line 31, Table II).

Regarding claim 18, the inner layer of nonwoven polypropylene has a thickness ranging between 76.2 and 1016 microns and unit weight ranging between 35 and 45 g/m<sup>2</sup> and the outer polyethylene film has a thickness ranging between 30 and 70 microns and unit weight ranging between 20 and 30 g/m<sup>2</sup> (column 3 lines 6-21, column 7 line 37 to column 8 line 31, Table II).

Regarding claim 19, the thickness of the material ranges between 101.6 and 1041.4 microns and the unit weight ranges between 60.0 and 67.5 g/m<sup>2</sup> (column 3 lines 6-21, column 7 line 37 to column 8 line 31, Table II).

Regarding claim 20, the inner layer of nonwoven polypropylene has a thickness ranging between 76.2 and 1016 microns and unit weight ranging between 37.5 and 40.0 g/m<sup>2</sup> and the outer polyethylene film has a thickness ranging between 40 and 60 microns and unit weight ranging between 22.5 and 27.5 g/m<sup>2</sup> (column 3 lines 6-21, column 7 line 37 to column 8 line 31, Table II).

In the event it is shown that Bodford does not disclose the claimed invention with sufficient specificity, the invention is obvious because Bodford discloses the claimed constituents and discloses that they may be used in combination.

# Claim Rejections - 35 USC § 103

10. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,865,926 to Wu in view of McCormack.

Regarding claims 15 and 16, Wu teaches a gown, jacket or trousers, suitable as protective clothing against biological agents and exhibiting very high level of protection against the penetration of liquids and microorganisms, mechanical resistance properties as well as outstanding softness, drapeability and comfort, characterized in that the material is manufactured by the lamination of an inner layer of non-woven polypropylene with an outer layer of polyethylene film, (see entire document including column 2 lines 2-29, column 3 line 2 to column 4 line 42).

Regarding claims 15 and 16, Wu does not appear to disclose that the unit weight ratio between polypropylene and polyethylene ranges from 70:30 to 50:50, or from 65:35 to 55:45. Since Wu is silent with regards to the weight of the microporous polyethylene film, it would have been necessary and thus obvious to look to the prior art for conventional weights of microporous polyethylene films. McCormack provides this conventional teaching showing that it is known in the garment art to use a microporous polyethylene film on a polypropylene nonwoven wherein the film weighs less than about 35 g/m² (McCormack, column 1 lines 16-31, column 4 lines 3-11, column 8 lines 17-34). Therefore, it would have been obvious to one having ordinary skill in the garment art at the time the invention was made to make the microporous polyethylene film of Wu with the film weight as taught by McCormack, motivated by the expectation of forming the microporous polyethylene film and polypropylene nonwoven protective clothing which is soft and breathable.

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11. Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu in view of McCormack, as applied to claims 15 and 16, and further in view of Bodford.

Regarding claims 17-20, Wu in view of McCormack teaches that the unit weight of the material ranges between 55 and 75 g/m<sup>2</sup> or 60.0 and 67.5 g/m<sup>2</sup>, that the unit weight of the nonwoven polypropylene ranges between 35 and 45 g/m<sup>2</sup> or 37.5 and 40.0 g/m<sup>2</sup>, that the polyethylene film unit weight ranges between 20 and 30 g/m<sup>2</sup> or between 22.5 and 27.5 g/m<sup>2</sup>, and that the thickness of the polyethylene film ranges between 30 and 70 microns or between 40 and 60 microns (Wu, column 3 line 2 to column 4 line 42; McCormack, column 8 lines 17-34). However, Wu in view of McCormack does not appear to teach the claimed thickness of the nonwoven or the claimed thickness of the entire material. Since Wu in view of McCormack is silent with regards to the thickness of the material, it would have been necessary and thus obvious to look to the prior art for conventional thicknesses of composites comprising microporous polyethylene films laminated to a polypropylene nonwoven. Bodford provides this conventional teaching showing that it is known in the garment art to form garments comprising microporous polyethylene films laminated to a polypropylene nonwoven wherein the thickness of the nonwoven is 76.2-1016 microns (Bodford, column 3 lines 6-21, column 7 line 37 to column 8 line 31, Table II). Therefore, it would have been obvious to one having ordinary skill in the garment art at the time the invention was made to make the garment of Wu in view of McCormack with the nonwoven thickness as taught by Bodford, motivated by the expectation of successfully practicing the invention of Wu in view of McCormack. Additionally, the polypropylene nonwoven and polyethylene film composite would therefore have a thickness between 82.55 microns to preferably 1066.8 microns.

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12. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCormack in view of EP 0360208 to Langley.

Regarding claim 21, McCormack does not appear to teach that the join[t]s are made by heat welding. Since McCormack is silent with regards to the method of sealing the joints, it would have been necessary and thus obvious to look to the prior art for conventional methods. Langley provides this conventional teaching showing that it is known in the garment art to fabricate garments using a heat-sealing methods when the garments comprise a polyethylene film and a polypropylene nonwoven (page 3 lines 3-41). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the garment of McCormack from heat-sealing method of Langley, motivated by the expectation of using a suitable method for forming garments comprising a polyethylene film and polypropylene nonwoven.

13. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bodford in view of Langley.

Regarding claim 21, Bodford does not appear to teach that the join[t]s are made by heat welding. Since Bodford is silent with regards to the method of sealing the joints, it would have been necessary and thus obvious to look to the prior art for conventional methods. Langley provides this conventional teaching showing that it is known in the garment art to fabricate garments using a heat-sealing methods when the garments comprise a polyethylene film and a polypropylene nonwoven (page 3 lines 3-41). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the garment of

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Bodford from heat-sealing method of Langley, motivated by the expectation of using a suitable

method for forming garments comprising a polyethylene film and polypropylene nonwoven.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Peter Y. Choi whose telephone number is (571) 272-6730. The

examiner can normally be reached on Monday - Friday, 08:00 - 15:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

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information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Peter Y. Choi

April 12, 2007

Ms. Arti R. Singh

Primary Examiner Tech Center 1700